

## **Voice Range Profile**

The Voice Range Profile or Phonetogram is a measurement of the frequency and intensity range of your voice. It involves singing as loudly and as softly as you can at selected pitches throughout your range, from the lowest note you can produce to the very highest. Results are graphed. There are software programs that can do this very efficiently. You can also do it in a very low-tech manner. All you need is a keyboard or phone app for cueing pitches and a sound level meter. That's our plan for this lab.

Procedure:

Lowest note (find it!) you can *possibly* sound (not a musical sound you'd want anyone to hear) \_\_\_\_\_

Highest note you can squeak out (again, not a musical sound, but a physiological limit) \_\_\_\_\_

Convert range into semitones. Divide into 10 equally spaced points. Put pitches into blanks below. Often going by major thirds works well, so you have three measurements per octave. You also have the option of doing one VRP using your Western Classical production and another using your popular/CCM/world music production. TBB singers, you can also gather data using M2 ("falsetto") for soft production and very high production. Just make notes in the far right column.

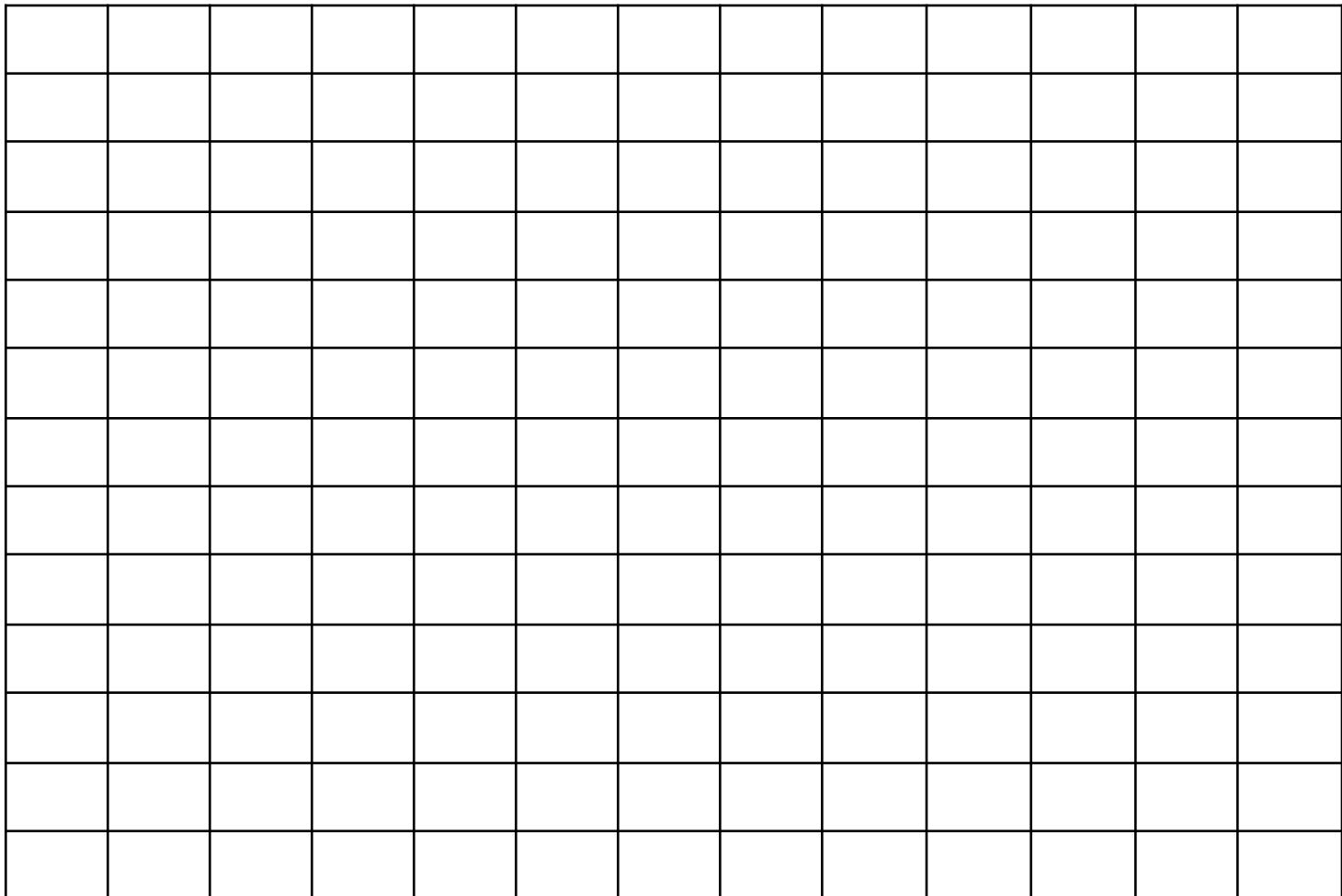
It is best to start low and not very warmed up; your lowest range will not be accessible after extensive high singing. Also, for each pitch, do the softest singing first. Your softest singing is typically achieved without taking a big breath. Watch the pitch carefully low in your range when singing your loudest, as the pitch will tend to be sharp due to the high breath pressure.

Pitch number	Softest (in dB)	Loudest (in dB)	Notes, comments on this pitch
1.(lowest)			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.(highest)			

Now take the pitch and intensity results of your “vocal treadmill test” and plot them on the graph below.

VRP for (your name) \_\_\_\_\_ taken on (today’s date) \_\_\_\_\_

Put dB on the vertical (y) axis and pitch on the horizontal (x) axis. Plot the dB value for the softest and loudest of each pitch you tested. Then connect with a line all the softest data points, and do another line for all the loudest ones. The resulting graph often looks like a rough outline of a football or watermelon that’s at about a 45 degree angle.



The great thing about the VRP is you can do it periodically and track changes in your voice as you make progress with technical issues.